ORIGIN 1 mqrlgatllc lllaaavpta papaptatsa pvkpgpalsy pqeeatlnem freveelmed 61 tqhklrsave emeaeeaaak assevnlanl ppsyhnetnt dtkvgnntih vhreihkitn 121 nqtgqmvfse tvitsvgdee grrsheciid edcgpsmycq fasfqytcqp crgqrmlctr 181 dseccgdqlc vwghctkmat rgsngticdn qrdcqpglcc afqrgllfpv ctplpvegel 241 chdpasrlld litwelepdg aldrcpcasg llcqphshsl vyvckptfvg srdqdgeill 301 prevpdeyev gsfmeevrqe ledlerslte emalgepaaa aaallggeei

Figure 2

```
BASE COUNT
                625 a
                         618 c
                                  668 g
                                           567 t
                                                      1 others
ORIGIN
        1 ggcacgaggg ggcggcggct gcgggcgcag agcggagatg cagcggcttg gggccaccct
      61 gctgtgcctg ctgctggcgg cggcggtccc cacggccccc gcgcccgctc cgacggcgac
      121 ctcggctcca gtcaagcccg gcccggctct cagctacccg caggaggagg ccaccctcaa
      181 tgagatgttc cgcgaggttg aggaactgat ggaggacacg cagcacaaat tgcgcagcgc
     241 ggtggaagag atggaggcag aagaagctgc tgctaaagca tcatcagaag tgaacctggc
      301 aaacttacct cccagctatc acaatgagac caacacagac acgaaggttg gaaataatac
      361 catccatgtg caccgagaaa ttcacaagat aaccaacaac cagactggac aaatggtctt
      421 ttcagagaca gttatcacat ctgtgggaga cgaagaaggc agaaggagcc acgagtgcat
     481 catcgacgag gactgtgggc ccagcatgta ctgccagttt gccagcttcc agtacacctg
     541 ccagccatgc cggggccaga ggatgctctg cacccgggac agtgagtgct gtggagacca
     601 gctgtgtgtc tggggtcact gcaccaaaat ggccaccagg ggcagcaatg ggaccatctg
     661 tgacaaccag agggactgcc agccggggct gtgctgtgcc ttccagagag gcctgctgtt
     721 ccctqtqtgc acaccctqc ccqtqqaqqq cqaqctttqc catqaccccq ccaqccqqct
     781 tetggacete ateacetggg agetagagee tgatggagee ttggacegat gecettgtge
     841 cagtggcctc ctctgccagc cccacagcca cagcctggtg tatgtgtgca agccgacctt
      901 cgtggggagc cgtgaccaag atggggagat cctgctgccc agagaggtcc ccgatgagta
      961 tgaagttggc agettcatgg aggaggtgcg ccaggagctg gaggacctgg agaggagcct
     1021 gactgaagag atggcgctgg gggagcctgc ggctgccgcc gctgcactgc tgggaggga
1081 agagatttag atctggacca ggctgtgggt agatgtgcaa tagaaatagc taatttattt
     1141 ccccangtgt gtgctttaag cgtgggctga ccaggcttct tcctacatct tcttcccagt
     1201 aagttteece tetggettga cageatgagg tgttgtgeat ttgtteaget eececagget
     1261 gttctccagg cttcacagtc tggtgcttgg gagagtcagg cagggttaaa ctgcaggagc
     1321 agtttgccac ccctgtccag attattggct gctttgcctc taccagttgg cagacagccg
     1381 tttgttctac atggctttga taattgtttg aggggaggag atggaaacaa tgtggagtct
     1441 coctotgatt ggttttgggg aaatgtggag aagagtgood tgotttgcaa acatcaacct
     1501 ggcaaaaatg caacaaatga attttccacg cagttctttc catgggcata ggtaagctgt
     1561 gccttcagct gttgcagatg aaatgttctg ttcaccctgc attacatgtg tttattcatc
     1621 cagcagtgtt gctcagctcc tacctctgtg ccagggcagc attttcatat ccaagatcaa
     1681 ttccctctct cagcacagcc tggggagggg gtcattgttc tcctcgtcca tcagggattt
     1741 cagaggetea gagaetgeaa getgettgee caagteacae agetagtgaa gaccagagca
     1801 gtttcatctg gttgtgactc taagctcagt gctctctcca ctaccccaca ccagccttgg
     1861 tgccaccaaa agtgctcccc aaaaggaagg agaatgggat ttttcttttg aggcatgcac
     1921 atctggaatt aaggtcaaac taattctcac atccctctaa aagtaaacta ctgttaggaa
     1981 cagcagtgtt ctcacagtgt ggggcagccg tccttctaat gaagacaatg atattgacac
     2041 tgtcctctt tggcagttgc attagtaact ttgaaaggta tatgactgag cgtagcatac
     2101 aggttaacct gcagaaacag tacttaggta attgtagggc gaggattata aatgaaattt
     2161 gcaaaatcac ttagcagcaa ctgaagacaa ttatcaacca cgtggagaaa atcaaaccga
     2221 gcagggctgt gtgaaacatg gttgtaatat gcgactgcga acactgaact ctacgccact
     2281 ccacaaatga tgttttcagg tgtcatggac tgttgccacc atgtattcat ccagagttct
    2341 taaagtttaa agttgcacat gattgtataa gcatgctttc tttgagtttt aaattatgta
     2461 aaaaaaaaaa aaaaaaaaa
```

Figure 3

DQDGEILLPR

Figure 4



